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## NOTICE OF ALLOWANCE AND FEE(S) DUE

2512

Perman & Green, LLP 99 Hawley Lane

Stratford, CT 06614

7590

10/06/2010

EXAMINER

ZEWARI, SAYED T

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 10/06/2010

	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
•	10/523,616	11/23/2005	Tommy Kristensen Bysted	939-012101-US (PAR)	1359

TITLE OF INVENTION: TRANSMITTING INTERLEAVED MULTIPLE DATA FLOWS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	01/06/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

## PART B - FEE(S) TRANSMITTAL

## Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

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	ENCE ADDRESS (Note: Use Bl	,	Fee(	s) Transmittal. This ce rs. Each additional pa	rtificate cannot be used f	r domestic mailings of the or any other accompanying nt or formal drawing, must
Perman & Gree 99 Hawley Lane Stratford, CT 06		/2010	State addr	eby certify that this F is Postal Service with essed to the Mail St	ate of Mailing or Trans ee(s) Transmittal is being sufficient postage for firs pp ISSUE FEE address (571) 273-2885, on the d	deposited with the United t class mail in an envelope above, or being facsimile
						(Depositor's name)
						(Signature)
						(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	AT	TORNEY DOCKET NO.	CONFIRMATION NO.
10/523,616 11/23/2005 Tommy Kristensen Bysted 939-012101-US (PAR) 1359 TITLE OF INVENTION: TRANSMITTING INTERLEAVED MULTIPLE DATA FLOWS						
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FE	E TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	01/06/2011
EXAM	IINER	ART UNIT	CLASS-SUBCLASS			
ZEWARI,	SAYED T	2617	370-345000			
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.  3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)  PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.  (B) RESIDENCE: (CITY and STATE OR COUNTRY)						
Please check the appropr	riate assignee category or	categories (will not be pr	rinted on the patent): $\Box$	Individual 🖵 Corpo	ration or other private gro	oup entity 🚨 Government
4a. The following fee(s)  Issue Fee Publication Fee (N Advance Order - :	No small entity discount p		4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)  ☐ A check is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).			
a. Applicant claim	<b>itus</b> (from status indicated as SMALL ENTITY statu	is. See 37 CFR 1.27.	☐ b. Applicant is no long	-		
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if requeecords of the United Sta	uired) will not be accepte tes Patent and Trademark	d from anyone other than the Office.	ne applicant; a register	ed attorney or agent; or th	e assignee or other party in
Authorized Signature	-			Date		
			Registration No.			
This collection of inform an application. Confiden submitting the completed this form and/or suggesti	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but	EFR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the	on is required to obtain or re 1.14. This collection is estive depending upon the indivi- e Chief Information Office	etain a benefit by the p mated to take 12 min idual case. Any comm r, U.S. Patent and Tra	ublic which is to file (and ites to complete, including ents on the amount of tind demark Office, U.S. Department	by the USPTO to process) g gathering, preparing, and me you require to complete artment of Commerce, P.O.

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10/523,616	616 11/23/2005		Tommy Kristensen Bysted	939-012101-US (PAR) 1359		
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Perman & Green, LLP				ZEWARI, SAYED T		
99 Hawley Lane Stratford, CT 06614			ART UNIT	PAPER NUMBER		
				2617		
				DATE MAILED: 10/06/2010		

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 312 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 312 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)					
	10/523,616	BYSTED ET AL.					
Notice of Allowability	Examiner	Art Unit					
	CAVED T. ZEWARI	0047					
	SAYED T. ZEWARI	2617					
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this or other appropriate communica IGHTS. This application is subje	application. If not included tion will be mailed in due course. <b>THIS</b>					
1. This communication is responsive to <u>9/23/2010</u> .							
2. X The allowed claim(s) is/are <u>12-17,20,23-28 and 31</u> .							
<ul> <li>3. Acknowledgment is made of a claim for foreign priority una)</li> <li>All b) Some* c) None of the:</li> <li>1. Certified copies of the priority documents have</li> <li>2. Certified copies of the priority documents have</li> <li>3. Copies of the certified copies of the priority documents</li> </ul>	been received. been received in Application No	·					
International Bureau (PCT Rule 17.2(a)).	cuments have been received in t	nis national stage application from the					
* Certified copies not received:							
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.							
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give							
5. CORRECTED DRAWINGS ( as "replacement sheets") mus	et be submitted.						
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached							
1)  hereto or 2)  to Paper No./Mail Date							
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date							
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).							
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.							
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5. ☐ Notice of Informa	al Patent Application					
2.  Notice of Draftperson's Patent Drawing Review (PTO-948)	6. Interview Summ						
3. ☑ Information Disclosure Statements (PTO/SB/08),	Paper No./Mail 7. ⊠ Examiner's Ame	Date ndment/Comment					
Paper No./Mail Date  4. Examiner's Comment Regarding Requirement for Deposit	8. 🛛 Examiner's State	ement of Reasons for Allowance					
of Biological Material	9.						
/Sayed T Zewari/							
Examiner, Art Unit 2617							

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#### **DETAILED ACTION**

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## Allowable Subject Matter

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Joseph V. Gamberdell, Jr. on 9/20/2010 and subsequent submission of proposed amendment on the same date.

The application has been amended as follows:

## IN THE CLAIMS

- 1-11. (Cancelled)
- 12. (Currently Amended) A mobile phone comprising:

a transmitter for transmitting blocks of digital data, the transmitter comprising radio transmitter circuitry and processing means, the processing means including a memory storing data representing a set of processing manners, said data defining a block size and a transmission time therefor for each processing manner, wherein the processing means is configured to:

process at least one data flow, the or each data flow being processed according to manners selected from said set of processing manners;

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concatenate data from the or each data flow and a code identifying said selected manner or manners to produce a block of concatenated data; interleave said block; and transmit said block, wherein the depth of said interleaving corresponds to a transmission time

not greater than the least of said defined transmission times.

13. (Currently Amended) A transmitter according to <u>claim 12</u>, wherein said defined transmission times are integer multiples of the transmission time corresponding to said interleaving depth.

**Deleted:** claim 11

14. (Currently Amended) A transmitter according to claim 12, including a receiving means for receiving a signal defining said set of processing manners

Deleted: claim 11

- 16. (Currently Amended) A transmitter according to <u>claim 12</u>, wherein each processing manner includes an interleaving process definition.
- 18. (Cancelled)
- 19. (Cancelled)

20. (Currently Amended) A base station for a mobile phone network comprising:

a transmitter\_for transmitting blocks of digital data, the transmitter comprising
radio transmitter circuitry and processing means, the processing means including
a memory storing data representing a set of processing manners, said data
defining a block size and a transmission time therefor for each processing
manner, wherein the processing means is configured to:

Deleted: including

Deleted: according to claim 12

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process at least one data flow, the or each data flow being processed according to manners selected from said set of processing manners; concatenate data from the or each data flow and a code identifying said selected manner or manners to produce a block of concatenated data; interleave said block; and transmit said block, wherein the depth of said interleaving corresponds to a transmission time not greater than the least of said defined transmission times.

## 21-22. (Cancelled)

23. (Currently Amended) A method of <u>operating a mobile phone, comprising:</u>

transmitting a block of digital data <u>using radio transmitter circuitry</u>, <u>said</u>

transmitting comprising:

establishing data representing a set of processing manners, said data defining a block size and a transmission time therefor for each processing manner,

processing at least one data flow, the or each data flow being processed according to manners selected from said set of processing manners; concatenating data from the or each data flow and a code identifying said selected manner or manners to produce a block of concatenated data; interleaving said block; and transmitting said block,

Deleted: the method

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wherein the depth of said interleaving corresponds to a transmission time not greater than the least of said defined transmission times.

29.-30. (Cancelled)

31. (New) A method of operating a base station for a mobile phone network, comprising:

transmitting a block of digital data using radio transmitter circuitry, said transmitting comprising:

establishing data representing a set of processing manners, said data defining a block size and a transmission time therefor for each processing manner,

processing at least one data flow, the or each data flow being processed according to manners selected from said set of processing manners; concatenating data from the or each data flow and a code identifying said selected manner or manners to produce a block of concatenated data; interleaving said block; and transmitting said block,

wherein the depth of said interleaving corresponds to a transmission time not greater than the least of said defined transmission times.

[End Amendment]

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2. Therefore claims 12-17, 20, 23-28, 31 are allowed and renumbered as 1-14 respectively.

- 3. The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to teach or suggest the limitations of the claims with the reasons set forth in the applicant's response filed on 9/23/2010. The rejection of previously presented claims has been withdrawn.
- 4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

- 5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAYED T. ZEWARI whose telephone number is (571)272-6851. The examiner can normally be reached on 8:30-4:30.
- 6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester G. Kincaid can be reached on 571-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
- 7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Sayed T Zewari/ Examiner, Art Unit 2617

/LESTER KINCAID/ Supervisory Patent Examiner, Art Unit 2617